CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A composition comprising a protein in crystalline form wherein the protein consists of ~~SEQ. ID No.3~~ SEQ ID NO:3, and wherein the protein crystal has a crystal lattice in a $P4_122$ space group and unit cell dimensions, +/- 5%, of a=b= 85.159Å and c=152.18Å.

2-3. (Cancelled)

4. (Previously presented) A composition according to claim 1 wherein the protein crystal diffracts X-rays for a determination of structure coordinates to a resolution having a value that is less than or equal to 3.0 Angstroms.

5-8. (Cancelled)

9. (Currently amended) A method ~~for forming a crystal of a protein~~ comprising:

forming a crystallization volume comprising a precipitant solution and a protein that consists of ~~SEQ. ID No.3~~ SEQ ID NO:3, and wherein a protein crystal is formed that has a crystal lattice in a $P4_122$ space group and unit cell dimensions, +/- 5%, of a=b= 85.159Å and c=152.18Å; and

storing the crystallization volume under conditions suitable for formation of a protein crystal.

10-11. (Cancelled)

12. (Previously presented) A method according to claim 9 wherein a protein crystal is formed that diffracts X-rays for a determination of structure coordinates to a resolution having a value that is less than or equal to 3.0 Angstroms.

13-14. (Canceled)

15. (Previously presented) A method according to claim 9, wherein a protein crystal is formed, the method further comprising diffracting the protein crystal to produce a diffraction pattern and solving the structure of the protein from the diffraction pattern.

16-17. (Cancelled)

18. (Currently amended) A ~~composition comprising a~~ soluble protein consisting of ~~SEQ. ID No.3~~ SEQ ID NO:3.

19-26. (Cancelled)

27. (Withdrawn) The method according to claim 15 further comprising:

performing rational drug design using the solved structure; and

identifying an entity that associates with the protein.

28. (Withdrawn) The method according to claim 27 further comprising selecting one or more entities based on the rational drug design and contacting the selected entities with the protein.

29. (Withdrawn) The method according to claim 28 further comprising measuring an activity of the protein when contacted with the one or more entities.

30. (New) An isolated soluble protein consisting of residues 114-331 of SEQ ID NO:1.

31. (New) A non-crystalline protein consists of SEQ ID NO:3.

32. (New) An isolated noon-crystalline protein consisting of residues 114-331 of SEQ ID NO:1.

33. (New) A composition comprising a protein in crystalline form wherein the protein consists of 114-331 of SEQ ID NO:1, and wherein the protein crystal has a crystal lattice in a $P4_122$ space group and unit cell dimensions, +/- 5%, of a=b= 85.159Å and c=152.18Å.

34. (New) A method comprising:

forming a crystallization volume comprising a precipitant solution and a protein that consists of 114-331 of SEQ ID NO:1, and wherein a protein crystal is formed that has a crystal lattice in a $P4_122$ space group and unit cell dimensions, +/- 5%, of a=b= 85.159Å and c=152.18Å; and

storing the crystallization volume under conditions suitable for formation of a protein crystal.